Keeping Surfaces Safe in the Dental Setting: A Practice Guide to Barrier Protection

There are times when we need to put a barrier between ourselves and things that can do us harm. When a storm is coming through, we all prepare by having an umbrella at hand. In dentistry, that umbrella is barrier protection.

What Surfaces? Clinical contact surfaces should be treated with barrier protection, according to the Centers for Disease Control and Prevention (CDC). Clinical contact surfaces are surfaces that are touched or contaminated during the treatment of patients. Cross contamination from blood, saliva or other potentially infectious material can occur by overspray, gloved or ungloved hands, instruments, devices or simply by laying an item on a surface. Some examples of these surfaces are light handles, switches, dental radiographs, equipment, computers, drawer handles, faucet handles, countertops, pens, doorknobs, headrests and hoses.

Bacteria and viruses can stay on surfaces for extended periods of time. For example, Staphylococcus aureus (the bacterium associated with both methicillin-sensitive Staphylococcus aureus (MSSA) and methicillin-resistant Staphylococcus aureus (MRSA) have the ability to survive for up to 12 days on abiotic surfaces. Uncleaned surfaces may serve as a reservoir of contamination to people who come into contact with them, potentially leading to life-threatening diseases including MRSA and MSSA.

It is recommended by the CDC that whenever there is a surface that is difficult to clean such as switches and chairs, barrier protection should be used and is preferred. If the area has not been contaminated, you can simply remove the used barrier and replace it with a new barrier.

After each patient, clean and disinfect clinical contact surfaces that are not barrier-protected with an EPA-registered disinfectant. Use an intermediate-level disinfectant if visibly contaminated with blood.

Knowing What to Look for in Barrier Protection

When deciding what product to use, ask yourself these questions:

1. Does it fit the items I am going to work with?
2. Will it stay in place during treatment with minimum adjustments?
3. Has it been tested for blood and viral penetration?
4. Is it easy to place and remove?
5. Does it cover the area as much as possible and still allow the item to be used (such as switches and buttons)?

Kerr TotalCare Pinnacle Products meet all these requirements with their barrier protection products. All of these products have been blood and viral penetration tested to help protect you and your patients. Developed for simple placement and removal, they are easy to work with and come in a variety of sizes. The No Slip Chair Sleeve™ and Pinnacle Cover-All™ have a mild adhesive that ensures that the barrier will stay in place for as long as you want it to.
uncovered areas. It is imperative that the barrier stay in place and be easy to place and remove. Newsprint, paper and over-the-counter items such as plastic baggies have not been tested for blood and viral penetration and are not recommended. The Pinnacle Chair Sleeve™, Tray Sleeve™, Tube Sleeve™ and Syringe Sleeve™ are all great barriers to keep on hand to help ensure you have the barrier to match your office’s needs. Pinnacle also recently released a new Digital Sensor Sheath™ designed for a custom fit on your sensors.

Simple Steps for Using Barriers
1. Barriers are single-use items: they can become contaminated, even if you can’t see it. While wearing gloves, remove and discard barriers after each patient.
2. Turning large bags inside out as you remove them limits the chances of touching surfaces with the contaminated material. This works especially well with the extra long Pinnacle chair sleeve!
3. Carefully remove the barrier so that you do not contaminate the surface you are protecting. After removing the barrier, examine the surface to make sure it did not inadvertently become soiled. Using a product like Pinnacle Cover-All makes this simple, as these barriers were designed for easy placement and removal.
4. The surface should be cleaned and disinfected only if contamination is evident. It is not necessary to clean and disinfect if the area is not contaminated.
5. Otherwise, after removing gloves and performing hand hygiene, DHCP should place clean barriers before the next patient.
6. At the end of the day, clean and disinfect (a two-step process) all clinical contact surfaces in the operatory.

Keeping patients and staff safe is the first mission in dentistry. Maintaining compliance with established infection control standards that follow the most current guidelines to reduce the risks of health care-associated infections is one of the professional responsibilities and considerations listed in the American Dental Hygienists’ Association Standards for Clinical Dental Hygiene Practice. Barrier protection is the protective layer that helps to keep everyone safe.

Some Barrier Tips
• Large chair covers, like the Pinnacle Chair Sleeve, can be repurposed as your trash container for cleaning up the room after each patient. After you have carefully turned it inside out, put all the other barrier protection items, disposables such as 2x2s, cotton rolls, etc., in it. Because all the contamination is on the inside, the chair sleeve makes a great tool for room cleanup without getting the trash can out. It would then go into the trash.
• Extra long chair covers that have an extra two feet of plastic at the bottom, such as the Pinnacle Extra Long Chair Sleeve, make great dental unit covers and can cover the foot pedal at the same time.
• Prepare barrier protection kits ahead of time, and include a cover for hoses, chair, etc., on each tray to save time and make setup more efficient.
• Fold back the edge of adhesive products like Pinnacle Cover-All in one area so there is an area where the adhesive does not touch itself. This can help with easy removal after use.

Many surfaces in the dental setting may have the potential to spread disease. Helping to limit this by utilizing barrier protection can assist in keeping both the patient and dental team safe.

Patients’ Rights: Patients have the right to ask for the highest standards in infection control, but they may not think to do so. As a dental hygienist, you can assure your patient that procedures are in place to make sure that even areas that are difficult or impossible to clean are safe for patients and office personnel.

Practical Solution for Difficult-to-Clean Items
Many items, such as curing lights, are difficult to clean. The deep grooves and surfaces are hard to reach, making it a breeding ground for bacteria and viruses. Simply finding the barrier product to match the needs can save time and limit exposure to chemicals, viruses and bacteria. The Pinnacle Cure Sleeve™ Tip Cover and Cure Sleeve™ Handle Cover come in a variety of sizes to match your unit. They have been tested for blood and viral penetration and are easy to remove and replace.

References